

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and (backflow\$4 or (back adj flow\$4)) and harmonic\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 13:59
L2	42	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and (backflow\$4 or (back adj flow\$4)) and vibration\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:09
L3	26	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and (backflow\$4 or (back adj flow\$4)) and vibration\$1 and (pulse\$1 or pulsing\$1 or pulsat\$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:00
L4	23	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and (backflow\$4 or (back adj flow\$4)) and vibration\$1 and (pulse\$1 or pulsing\$1 or pulsat\$6) and (compare\$1 or comparing or comparison\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:08
L5	23	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and (backflow\$4 or (back adj flow\$4)) and vibration\$1 and (pulse\$1 or pulsing\$1 or pulsat\$6) and (compare\$1 or comparing or comparison\$1) and (ratio or ratios)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:09
L6	398	(702/56).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:10
L7	2	l6 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:10
L8	279	(702/127).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:20

L9	1	I8 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:13
L10	40	(73/861.351).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:13
L11	0	I10 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:14
L12	2182	(73/116).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:15
L13	0	I11 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:15
L14	244	(73/1.16).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:15
L15	2	I14 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:15
L16	1226	(73/861).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:15
L17	6	I16 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:16
L18	782	(73/118.2).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:21

L19	204	l18 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:16
L20	49	l18 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:22
L21	600	(702/108).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:20
L22	0	l21 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:20
L23	134	(702/113).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:20
L24	0	l23 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:21
L25	1929	(73/118.1).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:21
L26	43	l25 and ((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 14:22
S1	85	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near air near flow\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:26
S2	14	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near air near flow\$3)) and duct\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:29

S3	14	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near air near flow\$3)) and (duct\$1 or airduct\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:26
S4	24	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near air near flow\$3)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:33
S5	25	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near2 air near2 flow\$3)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:42
S6	0	"702"/\$.ccls. and (air near flowmeter\$1) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/23 17:43
S7	22	"702"/\$.ccls. and (air with flowmeter\$1) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 06:59
S8	25	"702"/\$.ccls. and ((mass near airflow\$3) or (mass near2 air near2 flow\$3)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 06:59
S9	22	"702"/\$.ccls. and (air with flowmeter\$1) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:30
S10	43	S8 or S9	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 06:59
S11	1652	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:31
S12	1405	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:31

S13	464	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:32
S14	172	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:38
S16	232	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4 or pipe or pipes)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 09:24
S17	78	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4 or pipe or pipes) and (((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) same magnitude\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 07:58
S18	46	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4 or pipe or pipes) and (((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) same magnitude\$1) and (convert\$5 or conversion\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 09:00
S19	1	FRIE-WERNE	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:51
S20	17	FRIE-WERNER	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:51

S21	1	FRIE-WERNER-DR	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:52
S22	2	FRIE-WERNER-RUDOLF	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:52
S23	3	HABERER-CHRISTOPH	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:52
S24	1	LIEDERER-HARALD	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 08:52
S25	19	"6098602"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 09:00
S26	92	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4 or pipe or pipes) and ((convert\$5 or conversion\$1) with (signal\$1 or output\$2 or output\$2))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 09:26
S27	99	((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) and magnitude\$1 and (magnitude\$1 with (airflow\$4 or air)) and (duct\$1 or airduct\$1 or conduit\$4 or pipe or pipes) and ((convert\$5 or conversion\$1) with (signal\$1 or output\$2 or output\$2 or value\$1))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 10:33
S28	153	((((mass near airflow\$3) or (mass near2 air near2 flow\$3) or (air with flowmeter\$1 with mass)) with ((convert\$5 or conversion\$1) with (signal\$1 or output\$2 or output\$2 or value\$1))))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/02/24 13:57

10627992_QUAL.txt

4517735 66
4523461 66
4604895 66
5954480 62
4561303 62
4870857 62
5537870 62
5714683 62
5753805 62
4885935 61
4955230 61
4984454 61
5705745 61
5706790 61
5823171 61
6101872 61
6320165 61
6817173 61
4888988 56
5465617 56
5467750 56
5824927 56
6047688 56
6085731 56
6119662 56
6119512 56
6155043 56
6167107 56
3704628 56
4262864 56
4317374 56
4387602 56
4389903 56
4433576 56
4437340 56
4445369 56
4454845 56
4463601 56
4527433 56
4557225 56
4572667 56
4594702 56
4594889 56
4628688 56
4771271 56
4776214 56
4784721 56
4789939 56
4843882 56
4844723 56

PLUS Search Results for S/N 10627992, Searched February 24, 2005

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

4517735
4523461
4604895
5954480
4561303
4870857
5537870
5714683
5753805
4885935
4955230
4984454
5705745
5706790
5823171
6101872
6320165
6817173
4888988
5465617
5467750
5824927
6047688
6085731
6119662
6119512
6155043
6167107
3704628
4262864
4317374
4387602
4389903
4433576
4437340
4445369
4454845
4463601
4527433
4557225
4572667
4594702
4594889
4628688
4771271
4776214
4784721
4789939
4843882
4844723

10627992_WEST.txt

(4517735 4523461 4604895 5954480 4561303 4870857 5537870 5714683 5753805 4885935
4955230 4984454 5705745 5706790 5823171 6101872 6320165 6817173 4888988 5465617
5467750 5824927 6047688 6085731 6119662 6119512 6155043 6167107 3704628 4262864
4317374 4387602 4389903 4433576 4437340 4445369 4454845 4463601 4527433 4557225
4572667 4594702 4594889 4628688 4771271 4776214 4784721 4789939 4843882 4844723).pn.

(4517735
4523461
4604895
5954480
4561303
4870857
5537870
5714683
5753805
4885935
4955230
4984454
5705745
5706790
5823171
6101872
6320165
6817173
4888988
5465617
5467750
5824927
6047688
6085731
6119662
6119512
6155043
6167107
3704628
4262864
4317374
4387602
4389903
4433576
4437340
4445369
4454845
4463601
4527433
4557225
4572667
4594702
4594889
4628688
4771271
4776214
4784721
4789939
4843882
4844723).pn.

10627992_CLS.txt
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10627992 on February 24, 2005

Original Classifications

6	73/118.2
5	73/204.26
3	73/204.21
3	123/520
2	73/204.27

Cross-Reference Classifications

3	73/204.26
2	60/307
2	73/1.34
2	73/115
2	73/118.2
2	73/202
2	123/674
2	123/698

Combined Classifications

8	73/118.2
8	73/204.26
3	73/202
3	73/204.21
3	123/520
2	60/307
2	73/1.34
2	73/115
2	73/117.3
2	73/204.27
2	123/674
2	123/698
2	216/2
2	701/103

Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10627992 on February 24, 2005

- 8 73/118.2 (6 OR, 2 XR)
Class 073 : MEASURING AND TESTING
73/116 MOTOR AND ENGINE TESTING
73/118.1 .Testing auxiliary unit
73/118.2 ..Intake air flow
- 8 73/204.26 (5 OR, 3 XR)
Class 073 : MEASURING AND TESTING
73/861 VOLUME OR RATE OF FLOW
73/204.11 .Thermal type
73/204.23 ..Having particular electrical heating,
cooling, or thermal sensing element
73/204.25 ...Resistive element
73/204.26With substrate carrier (e.g., thin film)
- 3 73/202 (1 OR, 2 XR)
Class 073 : MEASURING AND TESTING
73/861 VOLUME OR RATE OF FLOW
73/202 .Proportional
- 3 73/204.21 (3 OR, 0 XR)
Class 073 : MEASURING AND TESTING
73/861 VOLUME OR RATE OF FLOW
73/204.11 .Thermal type
73/204.21 ..With fluid flow deflector or restrictor
(e.g., baffle, constriction)
- 3 123/520 (3 OR, 0 XR)
Class 123 : INTERNAL-COMBUSTION ENGINES
123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
123/518 .Having fuel vapor recovery and storage system
123/519 ..Having an adsorbent canister
123/520 ...Purge valve controlled by engine parameter
- 2 60/307 (0 OR, 2 XR)
Class 060 : POWER PLANTS
60/272 INTERNAL COMBUSTION ENGINE WITH TREATMENT OR
HANDLING OF EXHAUST GAS
60/282 .By means producing a chemical reaction of a
component of the exhaust gas
60/307 ..Pressurizing means feeds reactive air to
reactor
- 2 73/1.34 (0 OR, 2 XR)
Class 073 : MEASURING AND TESTING
73/1.01 INSTRUMENT PROVING OR CALIBRATING
73/1.16 .Volume of flow, speed of flow, volume rate of
flow, or mass rate of flow
73/1.34 ..With signal processing, span or set point
adjustment (e.g., zero correction)
- 2 73/115 (0 OR, 2 XR)
Class 073 : MEASURING AND TESTING
73/112 POWER PLANT OR UNIT EFFICIENCY
73/115 .Pressure derivative

- 2 73/117.3 (1 OR, 1 XR)
 Class 073 : MEASURING AND TESTING
 73/116 MOTOR AND ENGINE TESTING
 73/117.2 .Disparate tests under operating conditions
 73/117.3 ..With continuous operation
- 2 73/204.27 (2 OR, 0 XR)
 Class 073 : MEASURING AND TESTING
 73/861 VOLUME OR RATE OF FLOW
 73/204.11 .Thermal type
 73/204.23 ..Having particular electrical heating,
 cooling, or thermal sensing element
 73/204.25 ...Resistive element
 73/204.27Wire type (e.g., hot wire)
- 2 123/674 (0 OR, 2 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
 123/672 .Including exhaust gas condition responsive
 means
 123/674 ..With modifying or updating memory (i.e.,
 learning)
- 2 123/698 (0 OR, 2 XR)
 Class 123 : INTERNAL-COMBUSTION ENGINES
 123/434 CHARGE FORMING DEVICE (E.G., POLLUTION CONTROL)
 123/672 .Including exhaust gas condition responsive
 means
 123/698 ..With addition of secondary fluid (e.g., fuel
 or exhaust gas)
- 2 216/2 (1 OR, 1 XR)
 Class 216 : ETCHING A SUBSTRATE: PROCESSES
 216/2 ETCHING OF SEMICONDUCTOR MATERIAL TO PRODUCE AN
 ARTICLE HAVING A NONELECTRICAL FUNCTION
- 2 701/103 (1 OR, 1 XR)
 Class 701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND
 RELATIVE LOCATION
 701/1 VEHICLE CONTROL, GUIDANCE, OPERATION, OR
 INDICATION
 701/99 .with indicator or control of power plant
 (e.g., performance)
 701/101 ..Internal-combustion engine
 701/102 ...Digital or programmed data processor
 701/103Control of air/fuel ratio or fuel injection

ab 1
abe 1
able 2
ables 1
abo 1
about 1
above 2
ac 1
accor 1
accordance 4
accordingly 2
account 2
accukate 1
accuracy 1
accurate 3
acdordance 1
aces 1
achi 1
achieve 1
ack 1
ackflow 1
acteristic 1
activating 1
actual 5
actuators 3
addi 1
addition 3
additional 3
adequate 1
advantage 1
after 3
against 1
age 1
agnitude 1
ahd 1
ai 6
ail 1
air 44
airf 3
airfl 1
airflok 2
airflol 1
airflow 107
airflows 3
airflpw 1
airflqw 1
aitflow 1
ajainst 1
ake 1
al 1
albeit 1
alpo 1
als 1
also 6
althqugh 1
always 3
amdltitudes 1
among 1
amount 3
amounts 2
amp 1
amplifier 1
amplitude 2

amplitudes 6
an 44
ana 1
anaiysis 1
anal 2
analog 5
analvsis 1
analy 1
analyses 4
analysis 29
analysls 1
analytical 1
and 99
angle 2
another 5
any 8
ap 1
apart 2
apd 2
appear 1
applic 2
application 4
applied 1
apply 1
apprgximately 1
appropr 1
appropriate 6
appropriately 1
approximately 1
approximati 1
apture 1
aptured 1
ar 2
ara 1
arameter 1
arbitrarily 1
are 32
area 1
arily 1
arise 2
arising 1
arm 3
armonic 1
arms 1
around 1
aroupd 1
arranged 2
arri 1
artic 1
articular 1
as 29
aspect 1
ass 1
assembly 1
at 29
ate 1
ated 1
ating 1
ation 2
ative 1
ause 1
available 1
aver 1

average 11
avoids 1
bac 1
back 1
backf 1
backfl 1
backflo 1
backflok 1
backflok 1
backflow 23
backflows 3
background 1
basi 1
basically 3
basil 1
basis 4
be 56
because 4
become 1
been 2
bef 2
before 4
beforg 1
begulating 1
bein 1
being 6
bell 1
below 2
ber 1
better 1
betw 1
between 8
bf 1
bk 1
ble 2
body 2
bon 1
borne 1
bra 1
bration 5
brations 2
bridge 8
brief 1
broad 2
busti 1
bustion 3
but 9
by 36
ca 1
can 41
cantly 1
captur 1
capture 4
captured 12
capturedr 1
captures 1
capturing 1
capturtd 1
carried 6
carriqd 1
carry 4
carrying 2
case 6

cated 1
cause 2
caused 4
cco 1
ce 2
ceeds 1
cf 4
cha 1
change 2
changed 1
charact 1
characteriseic 1
characteristic 9
charactetistic 1
chosen 4
chqractionistic 1
ci 1
circuit 1
ckflows 1
claim 1
claims 1
clea 1
clear 1
cles 1
cln 1
co 11
cohsists 1
com 1
combined 1
combu 1
combuseion 1
combust 1
combustion 18
comp 1
comparatively 1
compared 1
compares 1
comparing 1
compensated 1
compensating 1
complicated 1
componeht 1
components 1
comprises 4
comprisin 1
compriyes 1
con 2
conditions 3
connecfed 1
connected 9
consecutive 1
consisting 1
constant 4
constderaily 1
constructed 1
construction 2
contexe 1
control 7
controller 9
controllers 1
controlling 1
controls 1
conversion 1

converted 2
 converter 4
 converting 1
 cooled 1
 cooling 2
 cools 1
 copverted 1
 cor 2
 corkection 1
 corr 7
 corre 1
 correaponding 1
 corrected 4
 correcting 1
 correction 8
 correspnding 1
 correspohdi 1
 correspon 1
 correspond 5
 corresponding 21
 correspondingly 1
 corresponds 4
 corresppnding 1
 corrgsponding 1
 costly 1
 costs 1
 costul 1
 cotrected 1
 could 2
 cpuld 1
 crankshaft 2
 crankshakt 1
 creases 1
 ction 1
 ctrum 1
 cu 2
 cuit 1
 cular 1
 cur 2
 current 7
 curv 1
 curve 16
 cyanksha 1
 cycle 2
 cycles 2
 cylinders 3
 dan 1
 dance 1
 data 3
 db 6
 de 3
 deed 1
 defined 1
 defining 1
 deleted 1
 demand 1
 depend 2
 dependent 7
 depending 1
 depends 2
 depepding 1
 der 2
 described 1

describes 1
descried 1
description 2
designed 1
det 2
detailed 1
details 2
dete 1
detect 1
deter 1
determied 1
determin 1
determination 3
determine 9
determined 14
determinedf 1
determines 2
determinin 1
determining 4
determinpd 1
determipe 1
deterpined 1
detertine 1
device 11
devices 5
di 2
diagr 1
diagram 2
diagrams 2
diameter 1
die 3
diff 1
diffe 1
differ 1
differenc 1
difference 4
different 1
differential 1
diffi 1
difficult 2
digital 6
digitiz 1
digitized 6
digitizqd 1
dire 1
direction 10
directiop 1
directly 2
ditional 1
divided 3
dny 1
do 1
doing 2
down 4
downstream 1
dr 1
drawings 2
drawn 4
du 1
duce 1
duct 22
ducts 3
due 1

during 3
each 5
eak 1
easier 1
ebponding 1
ed 2
eed 1
ef 1
effected 1
effects 1
effeet 1
effort 1
ehe 3
ehen 1
ehgine 1
elceeds 1
element 3
elements 2
elimination 1
embod 1
embodiment 9
embodipent 1
en 2
enable 1
ences 1
eng 2
engin 3
engine 15
engines 4
ent 1
eorrrqction 1
eq 1
er 2
erably 1
erating 1
ermit 1
error 2
essary 1
essentially 1
est 2
established 6
establishes 1
establishing 1
estimation 1
eter 1
eu 1
ev 1
even 2
ewly 1
exact 1
examole 1
example 9
examples 1
exceeds 2
excursion 1
executed 1
executes 1
execution 2
exempl 1
exemplary 4
exhaust 1
existence 6
existing 1

exists 1
expecied 1
explained 1
explicitly 1
expressed 1
extensive 1
extent 2
extrapolated 1
extrapolation 1
fa 1
fact 1
factors 1
familiar 2
famillar 1
family 1
fast 2
faster 1
fect 1
fed 3
feed 1
ferable 1
ferent 1
fft 1
fgr 1
fheh 1
fici 1
ficient 1
field 1
fifst 1
fig 11
filed 1
film 3
find 1
finite 1
fir 1
first 13
flow 15
flowing 1
flowk 1
flows 1
fo 3
follows 1
for 84
form 8
formed 1
forms 2
fort 1
fot 1
found 1
four 2
fourier 7
fpr 1
fr 4
frdm 1
frequ 1
frequehcy 1
frequencies 2
frequency 20
frequendy 1
freeney 1
frequently 1
from 31
fromrthe 1

frquency 1
 ft 1
 fuel 3
 fuh 1
 fuhdamental 2
 full 1
 fun 1
 function 7
 functional 1
 fund 3
 fundam 1
 fundament 1
 fundamental 22
 further 6
 garded 1
 gas 2
 ge 1
 generally 2
 german 1
 gibration 1
 give 1
 given 2
 gna 1
 gnificantly 1
 grap 1
 graph 1
 great 1
 greater 3
 ha 3
 hafmonic 1
 handling 1
 hange 1
 har 2
 harm 1
 harmohic 2
 harmon 1
 harmonic 29
 harmonics 4
 harmopic 1
 has 5
 have 3
 having 2
 he 3
 heat 1
 heated 9
 heating 17
 held 1
 henc 1
 hence 3
 her 1
 here 3
 hereby 1
 herq 1
 hi 1
 hich 1
 high 1
 higher 2
 highest 1
 his 1
 hofever 1
 hot 3
 however 9
 ibration 1

ic 1
ication 1
ich 1
ics 1
ideally 1
identif 1
ie 1
ies 1
iete 1
if 24
iff 1
ih 2
ihe 1
iht 1
ihvention 1
iimes 1
illustrates 1
important 1
improve 1
in 156
include 2
includes 1
incorpo 1
independent 1
indicate 1
indicates 1
indicating 1
induce 1
inducted 2
ine 2
ined 1
inf 1
inferred 1
inflow 1
information 1
ing 7
ingly 1
initially 1
input 2
ins 1
installation 1
instantaneous 2
intake 20
intdke 1
integrate 1
intern 2
internal 21
internll 1
intervais 1
interval 4
intervals 5
into 7
inventi 1
invention 18
invqntion 1
ion 2
iop 1
ipmeni 1
ipto 1
ir 2
ircuit 1
irf 1
irflow 3

is 117
ists 1
it 29
itized 1
its 12
itude 4
iye 1
jram 1
jthe 1
july 1
khich 1
knduetioq 1
known 2
laplace 1
lar 1
larly 1
last 3
lates 1
latt 1
laying 1
lble 1
lead 2
leads 3
least 6
less 3
lete 1
leve 1
level 19
levels 1
lies 1
linear 3
linearity 2
linked 3
lished 1
lmental 1
lplitude 1
ln 1
lo 1
load 4
located 1
logarithms 1
longer 3
low 1
lower 3
lready 2
ls 2
lu 1
lude 1
lup 1
ma 2
made 6
magn 3
magneto 1
magni 1
magnit 1
magnitude 8
magnitudes 2
maintain 2
maintained 1
make 1
makes 2
mal 1
manner 2

manufact 1
manufacture 1
mas 1
masa 1
mass 125
maxima 1
maximum 5
may 5
mb 1
mbustion 1
means 1
meas 1
measgrement 1
measure 3
measured 3
measurement 4
measutement 1
mechanism 1
memoby 1
memork 1
memory 8
ment 1
mental 3
meters 2
method 13
methods 1
mib 1
mine 1
mines 1
minimum 2
mit 1
mkss 2
mlss 1
mo 1
model 2
modern 1
modes 1
modulaion 1
modulation 17
moduze 1
monic 3
more 6
most 6
moto 1
motor 12
moving 1
mplemented 1
mtored 1
multiple 2
must 1
na 1
nal 1
nals 1
nalysis 1
namely 3
nature 2
ncy 1
nd 1
ne 3
neces 1
necess 1
necessary 6
negative 4

negligible 1
next 1
ng 2
ngth 1
nic 2
nn 1
no 6
noise 1
non 7
normal 2
not 11
now 1
npt 1
nqgative 1
ns 1
nsforms 1
nta 1
ntly 1
nu 1
num 2
number 4
numher 2
obtain 1
obtained 2
occur 3
occurrence 1
occurs 3
of 253
often 1
ognized 2
ol 1
ombustion 1
ompdr 1
omputation 1
on 26
ona 1
ond 1
one 15
onic 1
onlk 1
only 8
onse 1
onset 1
onspt 1
onwards 1
operating 5
opezating 1
opposite 1
or 36
order 11
ordinates 1
ore 1
ored 1
orm 1
ormation 1
orre 1
orrected 1
os 1
ose 1
other 1
otherwise 1
otherwiser 1
otto 12

ou 2
out 14
output 15
outputs 2
ove 1
over 3
overlaid 2
overlying 1
overwri 1
ow 4
pa 1
pade 1
page 21
param 1
parameter 3
parameters 7
part 4
particglar 1
particu 1
particular 13
particularly 5
particuzar 1
partly 2
patent 1
pbssible 1
pe 2
peaks 9
pected 1
pend 1
pendent 1
pensor 1
per 4
perature 1
performed 7
performhg 1
period 1
permanent 1
permit 1
permits 1
pethod 1
pf 1
phase 2
plu 1
plus 1
ply 1
po 1
podulation 1
points 2
portance 1
pose 1
poses 1
posi 1
position 1
positive 1
poss 1
possible 7
power 1
ppeferable 1
pr 3
pre 2
prec 1
precise 1
precisely 2

predef 1
 predefined 1
 prefe 1
 preferable 7
 preferably 1
 prefqrable 1
 pres 1
 prescribe 2
 prescribed 11
 presence 1
 present 2
 presentation 1
 preyent 1
 prilapily 1
 principles 1
 priority 2
 problem 1
 procedure 1
 procepsor 1
 process 1
 processor 10
 proceysor 1
 produ 1
 produce 1
 product 2
 produdt 1
 program 5
 programmed 2
 propagation 1
 property 1
 propo 1
 provided 1
 provides 1
 prqferable 1
 pti 1
 ptured 1
 pu 2
 puisatory 1
 pul 1
 puls 3
 pulsa 2
 pulsating 1
 pulsatiohs 1
 pulsation 17
 pulsations 10
 pulsato 1
 pumping 1
 pur 1
 purp 1
 purpose 3
 purposes 2
 put 1
 qav 1
 qf 3
 qnd 1
 qngines 1
 quantities 1
 quency 1
 quently 1
 quire 1
 quired 1
 rable 1
 range 3

rangemehts 1
rapeter 1
rass 1
rat 1
rate 4
rated 1
ratio 9
ration 1
ratios 3
re 3
reach 1
reached 1
reason 1
recent 6
recognizing 1
recogni 1
recognize 1
recognized 1
redu 1
reduces 1
referable 1
reference 2
referepce 1
refetence 1
region 1
regulat 1
regulates 1
regulating 1
regulation 2
rel 1
relates 2
relationship 1
relative 3
reliably 2
rem 1
remains 1
remen 1
rence 1
rences 1
rength 1
rent 1
replaced 1
represe 1
representation 1
represents 1
reprqsen 1
required 5
requires 2
rescribed 1
resi 1
resistance 6
resistd 1
resistive 1
resistor 18
resistors 2
resonant 1
respec 1
responding 1
responds 1
resul 1
resulting 3
results 2
reverse 1

revolution 1
rflow 1
rger 1
rh 13
ribed 1
ries 1
ring 1
riod 1
rises 1
ristic 1
rl 2
rmined 1
roe 1
rors 1
rotation 9
rotational 4
rough 1
roughly 1
rpr 1
rqference 1
rr 1
rt 4
rv 4
ry 2
same 3
sampled 2
sampling 4
sape 2
sappling 1
sations 1
saved 6
schematic 1
schematically 1
scribed 3
se 4
search 4
searched 1
sec 1
second 4
secondly 1
segment 3
sehsqr 1
sen 1
senpor 1
sens 1
sensgr 1
sensitive 1
senso 3
sensor 73
sensors 10
sensory 2
sensot 1
senspr 1
senyors 1
seqsor 1
sequence 1
serie 1
series 9
serves 2
set 4
several 1
shaped 1
show 2

shown 6
shows 3
shqwn 1
sj 3
sig 1
signa 1
signal 34
signalp 1
signals 13
signed 1
signif 1
significant 1
significantly 2
simple 1
simpler 1
simplicity 1
simply 1
simul 1
simulated 1
simulatqd 1
since 1
sinupoidal 1
sinusoidal 1
sion 1
sipg 1
signal 1
signals 1
sis 1
sive 1
size 2
smaller 1
smooth 1
sne 1
so 12
some 2
sor 3
sp 2
spaced 3
sparing 1
spectra 2
spectrum 3
spectt 1
speed 17
spme 1
spond 1
sponding 4
spondipg 1
sponds 2
ss 1
standard 2
stantaneous 1
start 1
starts 1
state 2
states 1
stgnals 1
still 3
storage 2
stored 2
stores 1
str 1
streng 1
strengihs 1

strength 6
strengths 1
strong 1
su 1
subject 1
subjected 2
succe 1
successive 2
such 9
suf 1
suitable 1
summary 1
supplementary 2
supplies 1
system 5
tained 1
take 1
taken 2
tapped 3
tapping 1
te 1
technical 1
ted 1
temper 2
temperatu 1
temperature 4
temperqtpre 1
tempetature 1
temporarily 1
temporary 1
teristic 1
termination 1
terminated 1
ternal 1
terval 1
tests 1
th 18
tha 1
thai 1
than 11
thar 1
that 26
the 638
theib 1
their 2
them 3
then 21
there 3
therefore 4
thes 1
these 5
they 4
thg 1
things 1
thip 1
third 1
this 26
thl 1
thod 1
those 2
thp 1
thq 1
thqir 1

thr 1
three 2
threshold 6
throttle 1
through 7
thus 4
ti 1
tier 1
tihe 1
time 22
times 3
timing 1
tio 1
tion 19
tional 2
tions 3
tiop 1
tive 3
tively 1
tixed 1
tlo 1
to 164
together 5
togqther 1
toothed 1
tor 1
toring 1
toward 1
tp 1
tput 1
tputs 1
tract 1
tran 1
transform 2
transforms 3
trol 1
trolled 1
troller 2
trolling 1
trql 1
ts 3
tten 1
tual 1
tude 1
ture 3
tured 1
turn 1
tv 1
tween 1
twi 1
twice 1
two 3
tyo 1
typically 2
tze 1
ude 1
ue 1
ugh 1
ulsations 1
ult 1
ume 1
unc 1
uncorrected 1

undamentq1 1
undergo 1
underlies 1
understand 1
unje 1
uninterrupted 1
unit 7
up 3
uping 1
upstream 1
urthermore 1
us 2
use 14
used 19
uses 1
usin 1
using 8
using 1
utilizes 2
va 1
valges 1
value 30
values 32
valups 1
valuqs 1
valve 1
var 1
vari 1
variabl 1
variable 4
variables 4
varied 1
variety 1
ve 1
very 3
ves 2
vhe 1
via 1
vibkation 1
vibr 14
vibrat 1
vibrati 1
vibratign 2
vibratio 1
vibrationh 1
vibrationhs 1
vibration 58
vibrations 15
vibratiop 2
vibratiops 1
vibrqtions 1
vice 2
viiratio 1
vol 1
voltage 2
vstroke 1
wavelet 1
way 7
waya 1
were 1
what 1
wheel 1
wheh 1

when 11
where 1
whereas 1
whereby 2
whi 2
which 77
whidh 1
whieh 1
will 6
wire 7
wiring 1
with 43
within 2
work 5
working 1
works 1
ws 1
values 2
yibrations 1
yotation 1
ysis 2
zero 1
zi 1
zing 1